six true feet, being unguiculated. Here, however, as in *Chersis*, the labial palpi have no ungues at their extremity. Moreover, these labial palpi have only six joints; differing from those of spiders in general, which have seven.

I have named the species after my old and very distinguished friend Baron Walckenaer, to whom we owe so much of our knowledge of *Arachnida**. *Otiothops Walckenaeri* is found under stones in the woods of Cuba. My sketch is from the life.

PLATE II. Fig. 5. *Otiothops Walckenaeri*, magnified. β, disposition of eyes; *B*, sternum; *c*, first joints of coxæ; ε, first joint of labial palpi; ζ, labial palpi; θ, mentum; γ, maxilla; δ, maxillary palpus; α, base of antenna; σ, abdomen; ω, fusi.

II.—*On Fishes new to Ireland.* By WILLIAM THOMPSON, Esq., Vice-President of the Natural History Society of Belfast.

[Continued from Vol. I. p. 359.]

MOTELLA GLAUCA, Jenyns, Mackerel Midge.—Two minute specimens—the larger $1\frac{3}{4}$ inch long—of *Motella* that I have closely examined, and which were obtained at the South islands of Arran (off county Clare), by R. Ball, Esq., in June 1835, agree in every respect with the *Ciliata glauca* of Couch, described in the Magazine of Natural History, vol. v. p. 16; at the same time I cannot perceive any specific difference between them and *M. Mustela.*

PHYCIS FURCATUS, Flem., Common Fork-beard.—To Cortland G. M. Skinner, Esq., of Glynn Park, Carrickfergus, I am indebted for a remarkably fine specimen of this fish, which was kindly secured for me on its being stated by the fishermen who captured it to be a species quite unknown to them. It was taken on February 24, 1836 (a calm day), with a gaff or hook, as it "lay floundering" on the surface of the water; was very violent when brought on board, and before dying had struggled so hard as to divest itself of nearly all its scales.

* I wish, however, that in his excellent volume on Apterous insects in the 'Suites de Buffon' he had not been so fond of changing names. Surely Walckenaer can afford to despise the petty credit of assigning a generic name.

The discrepancies of authors relative to the *Phycis furcatus* induce me to add the following description of this individual: length 25 inches; greatest depth of body $6\frac{1}{2}$ inches; weight $6\frac{1}{2}$ lbs. With Cuvier's short description (Règ. An. t. 2. p. 335), and which is adopted in the 'Manual of British Vertebrate Animals,' it agrees in only one of the three specific characters, that of the first dorsal being more elevated than the second. Its 3rd D. ray is longest *, being 3 inches in length, and terminating in a filament; the 2nd ray is 2 inches, and the first but 10 lines long. Upper jaw much the longer; ventral fin, from base to extremity of the longer fork, $7\frac{3}{4}$ inches; to that of the shorter, $5\frac{1}{2}$ inches. Head 5 inches 10 lines long, nearly as one to four in length of body; P. fin rather more than half the length of the head, and central between the dorsal and ventral outline; profile rather angular from D. fin to eye, above which it is a little depressed; eye exceeding an inch in diameter; nostrils double, 3 lines apart; beard very slight, 1 inch 2 lines long; 2nd D. and A. fins increase gradually in breadth posteriorly, at their termination cut square, or at right angles to the body; no spines before the A. fin as in those described by Mr. Couch (Linn. Trans., vol. xiv. p. 75); tail obscurely rounded; lateral line much incurvated for two-thirds its length anteriorly; vent $10\frac{1}{2}$ inches from snout; "jaws and front of the vomer armed with several rows of sharp card- or rasp-like teeth."

D. 9—64; A. 54; P. 17 (6th longest); V. 1; C. 24, reckoning all; Br. 7.

Colour of body lilac grey, becoming paler towards the belly; D. A. and C. fins lilac grey, terminated with black; P. fin dark grey; V. fin greyish, towards extremity white; interior of gill covers rich purple; eyes silvery round the pupil, thence to circumference brown.

On dissection it proved a male, the milt weighing $11\frac{1}{4}$ oz. The stomach contained some crustacea and two small whitings (*Merlangus vulgaris*).

Since the above was written, I have learned that a specimen

* The error of Pennant and Cuvier in considering the 1st D. ray the longest may perhaps be attributed to a want of due examination, as otherwise it does so appear, and more especially in a dried specimen.

taken about the same place occurred to the late Mr. Templeton (Mag. Nat. Hist., vol. i. p. 411, New Series). The species should consequently have been omitted as an unrecorded Irish one; but as a description was drawn up, and specimens had not come under the inspection of either Yarrell or Jenyns previous to the publication of their respective works, it has been considered better with this notice to retain it.

Platessa Pola, Cuv., Pole.—On April 26, 1837, I procured, in Belfast market, six specimens of this fish, which had been taken along with turbot, &c. at Ardglass, on the coast of Down. Such is the difference in the number of rays in their fins, especially in the anal, that it seems to me desirable to be noticed at full length.

No. 1.	Length 14¾ inches;	D. 102;	A. 89;	V. 6.	
2.	„ 14½ „	102	88	6	
3.	„ 14¼ „	108	92	6	
4.	„ 13½ „	110	100	6	
5.	„ 13 „	102	86	6	
6.	„ 12 „	106	91	6	

No. 1.	P. 12	on upper, 10 on under side;	C. 19 à la Cuv., or 23 altogether.				
2.	12	„ 10 „	19	„	23	„	
3.	11	on each side	19	„	23	„	
4.	11	„	19	„	25	„	
5.	12	on upper, 10 on under side;	19	„	23	„	
6.	11	„ 10 „	19	„	22	„	

Branchiostegous membrane in each specimen consisting of five rays; in each likewise a short strong bony spine, directed forwards before the anal fin, but which cannot be called a spinous ray: in some individuals the skin covers it, in others the point is exposed.

With the short specific characters in the 'Manual of British Vertebrate Animals' these individuals agree, with one exception, that of the lateral line not being "straight throughout its course," although it is nearly so—from the origin it slopes gently over the pectoral fin, and thence to the tail is straight. They correspond in every detail with the general description in the same work, except in the following particulars, in which the specimens exhibit considerable difference. Mr. Jenyns remarks, "greatest elevation of the [dorsal] fin contained five times and a half in the breadth of the body,"

p. 459—in some of these it is contained but $3\frac{1}{2}$, in others 4 and $4\frac{1}{2}$ times, and this is not owing to difference of size in individuals; in the female specimen, which is of the largest size, the dorsal fin is rather lower compared with breadth of body than in the others. In the individual examined by Mr. Jenyns, the ventral fins are described to have equalled the pectorals in length, but in all these the latter are considerably longer, in some being one-third, in others one-fourth longer than the ventrals. With Mr. Yarrell's description they generally agree.

The *colour* of the upper side of these six specimens is one uniform tint, intermediate between the "yellowish brown" and "wood brown" of Syme's 'Nomenclature of Colours.' The fins are all merely of a darker shade, owing to the membrane being minutely spotted with a deeper brown; the hinder portion of the upper half of the P. fin is black, thus resembling this fin in all the British species of sole; "the edges of all the fins darker than the rest," as described by Mr. Yarrell; the under side of the three larger is pure white, of the three smaller white also, but closely dotted over with extremely minute black spots, which, without close examination, give to this portion the appearance of soiled white; pupil purplish black; irides silvery, in some of them tinged with gold.

On dissection, five of these individuals exhibited milt, and one of them roe; the ova of a very small size, and the milt not much developed. Excepting the stomach of one, which was empty, they all contained a few fragments of *Solen pellucidus* or *minutus*; in addition to this shell, three of them exhibited the remains of *Ophiuræ*; one, besides the *Solen* and *Ophiuræ*, presented some crustacea; and another, in addition to the *Solen*, the remains of marine worms, apparently *Planariæ*.

On May 5, 1837, I obtained a seventh specimen of *P. Pola*, which, like the others, was taken by trawling, at Ardglass. It was $12\frac{1}{2}$ inches long, and exhibited milt moderately developed. Its stomach contained fragments of *Solen pellucidus*, and a specimen of *Bulla lignaria*.

Solea Lingula, Rond.*, Red-backed Sole.—On the 23rd

* Solea *parva sive* Lingula, Rondeletius; see his figure of "la petite sole," p. 260; also Willughby's figure and description, p. 102, F. 8, fig. 1.

of August, 1836, three small specimens of this fish were captured by Mr. Hyndman and myself when dredging on a sandy bottom off Dundrum, in the county of Down.

No. 1.	Length 3½	inches;	D. 68;	A. 56.	
2.	„ 2½	„	72	56.	
3.	„ 2½	„	66	54.	
No. 1.	P. 4	upper side,	2	under side;	V. 5; C. 18 altogether.
2.	4	„	2	„	5 18 „
3.	4	„	2	„	5 19 „

Breadth of body of No. 1, 13 lines. In form they differ considerably from *Solea vulgaris*, by tapering towards the tail. Dorsal and anal fins similarly connected with the caudal, the last ray of each exhibiting a low inconspicuous membrane, which extends to the base of the outer caudal ray—these three fins, merely touching in this manner, appear at a cursory view unconnected. In the number of rays in the fins, and characters generally, they correspond with Donovan's description of the *Pleuronectes variegatus* (vol. v. p. 117), but differ remarkably from his figure in colouring; nor in this respect do they agree entirely with Hanmer's figure (Penn. Brit. Zoöl., vol. iii. pl. 48. ed. 1812), with which I consider them identical, as they want the blotches of black represented on the dorsal and anal fins. They also differ a little from each other in colouring, the largest being of an uniform reddish brown on the upper side; the two smaller, of a paler shade, with a series of roundish black spots on the body, a short way inwardly from the back of the dorsal and anal fins, and a few similar spots on the lateral line: in one the spots approaching the fins just named are eight in number, in the other they are fewer and less conspicuous. In the three specimens all the fins except the ventral have, at irregular intervals, an occasional ray black; the rays only exhibiting this colour.

Mr. Jenyns has called attention to the difference of colour and number of rays in the fins of the specimen he examined (p. 468) compared with the individual described by Mr. Hanmer. In both respects it appears the species is subject to considerable variation. Dr. Parnell has more recently described (Mag. Zool. and Bot., vol. i. p. 527) what he considers to be a new species of sole, and names *Monochirus minutus*;

but a comparison of my specimens with his description satisfies me of their identity. The specific character of *M. minutus* is "every sixth or seventh ray of the dorsal and anal fins black," which marking appears in the individuals under consideration, though less regularly; their dorsal fins are connected with the caudal as in this fish, although the junction, as before mentioned, is only observable on close examination. Two of my three specimens at the same time display "blackish spots, which extend beyond the base of the rays [of the D. and A. fins] towards the body of the fish," a character remarked by Dr. Parnell as distinguishing *M. Lingula* from his new species. My specimens generally possess in common the characters of *M. Lingula* and *M. minutus*.

In Mr. Yarrell's collection there is a dried specimen, $4\frac{1}{4}$ inches long, from the Mediterranean, identical with mine, and like them displaying conspicuously, at irregular intervals, the black markings on the dorsal and anal fins*.

ADDENDUM.

Solea Lingula and *Solea variegata*. Belfast, June 18, 1838. Among some small fishes taken by dredging within the entrance to Belfast bay by my friend Dr. J. L. Drummond, on the 16th instant, and considerately forwarded to me when quite recent, were five specimens of *Solea*, or *Monochirus* (Cuv.). Of these, which with one exception were examined before being transferred to spirits, four individuals, varying from $3\frac{1}{2}$ to $4\frac{1}{4}$ inches in length, are the *Solea Lingula*, Rond.; and one, $2\frac{3}{4}$ inches long, the *Pleuronectes variegatus* of Donovan. In our two latest and best works upon the subject—Yarrell's 'British Fishes,' and Jenyns's 'Manual of British Vertebrate Animals'—these names are brought together as synonymous, or representing but one species, with, however, an expression of doubt as to its correctness by the latter author. A comparative examination of the present examples satisfies me that they apply to two distinct species.

In placing the individuals together, the most obvious differ-

* Dublin, June 1838.—A specimen of this sole $3\frac{1}{2}$ inches long, and taken at Youghal, is in the collection of R. Ball, Esq. Its upper side does not exhibit any variegation of colours, but is of an uniform reddish brown hue. The rays of the dorsal and anal fins are occasionally black, as in all individuals of this species I have seen.

ences appear in the dark blotches and transverse bands of *S. variegata* (*Pleur. variegatus*, Don.) contrasted with the comparatively uniform tint of *S. Lingula*; in the scales of *S. variegata* being very much smaller *, in its eyes being relatively to each other placed more vertically, in the dorsal and anal fins being rather more distant from the caudal fin, and in the general form of the body, which tapers less towards the tail; the rays too of the dorsal and anal fins are considerably fewer in number than in *S. Lingula*.

The colour generally of the *S. variegata* is very similar to that of Donovan's figure (British Fishes, vol. v. pl. 117), being of a pale yellowish brown, with the three conspicuous dark transverse markings approximating more the form of bands, and equidistant from each other, the last extending entirely across the body; the indication of a fourth band appears above the termination of the opercle, one (narrow and inconspicuous) at the base, and another near the extremity of the caudal fin; the body is likewise marbled with blackish brown, towards, and spreading over, the base of the dorsal and anal fins; between the bands are faint markings of pale brown; dorsal and anal fins pale yellowish brown, marked irregularly with black towards the tail.

The four specimens of *S. Lingula*, though not all exactly of the same shade of colour, are on the upper side of a pale brown, entirely and closely freckled over with a darker tint, and exhibiting several small roundish dark brown and white spots on the body at the base of the dorsal and anal fins, and along the lateral line: these brown and white spots are often disposed alternately. The largest individual presents in addition to them, small white specks over the body generally.

* Although I here speak only relatively to the size of the scales of *S. Lingula*, the remark may without explanation seem inconsistent with Donovan's "specific character" of the variegated sole, in which the scales are stated to be "large;" but a reference to his general description will show that it is the comparative magnitude of its scales to those of the common sole (*S. vulgaris*) to which he alludes, and in which he is correct, as he likewise is in describing those of the latter species to be "remarkably diminutive." The scales of my specimen accord in size with those of Donovan's figure of *P. variegatus*: being reckoned from the origin of the lateral line to the base of the rays of the caudal fin (those on the rays not being enumerated) they are about eighty-five in number; in the specimen of *S. Lingula* examined there are about seventy scales within the same space. The scales lie more closely to the body in *S. Lingula* than in *S. variegata*.

Rays of dorsal and anal fins occasionally black. Pupil dark blue, surrounded by a golden ring of about a hair's breadth. The number of fin-rays in my specimen of *S. variegata* are D. 63, A. 49, P. 4*, V. 4, C. 19 in all. In two of the specimens of *S. Lingula*, varying most from each other in size, there are 72 rays in the dorsal and 56 in the anal fin; two others have the dorsal with 76 and the anal with 58 and 59 rays.

Both species have papillæ on the under surface of the head, are rough with ciliated scales on the under as well as the upper side, and have the nostrils tubular, but not to such an extent as Risso, terming the projection a "barbillon," figures that of his *Monochirus Pegusa*.

The variegated sole of Donovan and Yarrell appears to be the same, and with it I consider the individual under consideration identical. With Mr. Jenyns's description of *S. Lingula* my other specimens accord, as they also do with Mr. Hanmer's description and figure of the red-backed sole (Pennant's British Zoology, vol. iii. p. 313, pl. 48, ed. 1812), with the exception of the black markings on the dorsal and anal fins, extending over several rays and their connecting membrane, instead of being confined to a single ray as in all the specimens I have examined.

It is worthy of investigation whether the *Monochirus Pegusa* of Risso (t. 3, p. 258, f. 33, ed. 1826) be different from the *Solea variegata* here treated of. The figure and description of that species, though not in every respect accordant with each other, present many characters in common with it.

The *S. variegata* is here for the first time recorded as occurring on the coast of Ireland.

Anguilla latirostris, Yarr. Broad-nosed Eel.—When at Toome (county Antrim) in Sept. 1834, a kind of eel was described to me as very different from the species (*A. acutirostris*) taken there in such abundance when entering the river Bann in autumn, on their passage from Lough Neagh to the sea. It was called "Culloch or hunter-eel," and was

* This refers to the upper side, in which the second ray is the longest, and terminated by a filament; length of this ray and filament 1½ line: P. fin on under side rudimentary, half a line in length, and rays undistinguishable.

stated to differ much in appearance and voracity from that species. A very intelligent fisherman at another part of the lake, distinguishing it by the name of "Gorb-eel," bore testimony to its voracious propensity*. He believes it to live chiefly on pollans (*Coregonus Pollan*), from the circumstance of having frequently known it to destroy these fishes when in the nets. He considers this species to be stationary in the lake, where it is sought for during summer with night lines, generally baited with very large worms or small perch: about 5 lbs. is the greatest weight he has known it to attain.

In Belfast market I subsequently saw quantities of this eel from the above locality, when they proved to be the *A. latirostris*. On pointing them out to an angling friend, I was assured that he had seen similar eels from Lough Erne on sale in Enniskillen. A correspondent writing from Portumna, in allusion it is presumed to this species, mentions a large-mouthed eel, which preys much on fish, as an inhabitant of the river Shannon.

Mr. Yarrell observes, "In its habits the broad-nosed eel has not been distinguished by any peculiarity that I am aware of from the other common eel" (vol. ii. p. 299), but the following circumstances incline me to believe, in addition to what has been mentioned, that there is a further difference in this respect. On looking over some thousand eels, taken in the nets at Toome on the night of the 24th of Sept., I did not recognise one of the broad-nosed species, nor have I seen it among eels brought from this place to Belfast market, nor again with the *A. latirostris* exposed here for sale, have I detected the common eel; but as it is from an examination in a very few instances that I speak, this may perhaps apply only in general terms. The season at which the two species are brought to this market is different, the time for the *A. latirostris* being summer, and autumn for the *A. acutirostris*. The intelligent fisherman before noticed states, however, that he has taken both species on his night lines at the same time. He knew the broad-nosed from the common eel before it appeared at the surface, by the greater resistance offered, and

* Hence probably the name "Glut Eel," by which it was known to Pennant.

frequently it was brought up twisted round the line in its endeavours to become extricated from the hook.

During the summer months the *A. latirostris* is brought in by the tide as it flows over the banks of Belfast bay, and is taken by eel-spearers. A specimen $4\frac{1}{2}$ inches long that I examined, and which was procured off the coast of the county Antrim at mid-winter, had in proportion to its size every character as strongly marked as the largest of its species: the fleshy prominence on each side of the head and terminating at the nape was very conspicuous.

Ammodytes Tobianus, Bloch. Wide-mouthed Sand-eel. —This species is rare on the shores of Ireland as elsewhere compared with *A. Lancea.* Of the latter, were specimens of *Ammodytes* favoured me by Mr. R. Ball from the coast of Cork, and with one exception, all that I have taken from the stomachs of the cod and other fishes. Such likewise, judging from their size, ("four to nine inches in length") are those described in the 'Wild Sports of the West' as sought for on the coast of Mayo, and also those taken on the sands adjoining the village of Bushfoot near the Giants' Causeway. In this last locality I speak on the authority of a gentleman who has often been present at the sand-eel fishing, and who, on being shown my specimens of *A. Tobianus,* remarked that he had never seen any of those taken there at all approaching them in size. In a paper by Dr. J. D. Marshall on the Statistics and Natural History of the island of Rathlin, published in a late part of the Transactions of the Royal Irish Academy, the *A. Tobianus* is enumerated among the fishes of the island; but I have the authority of the author for stating, that it is the common species now distinguished by the name of *A. Lancea**, to which he there alluded.

August 23, 1836.—On inquiring at Dundrum on the coast of Down about sand-eels, I ascertained that two species are procured in the extensive sands here; the larger of which is called "Snedden," and the smaller "Sand-eel," and that they are throughout the district considered as distinct as any two species of fish. This information induced me to attend the sand-eel fishing today, when at the extreme of low water I had

* Both species were until the last few years considered as one, which was designated *A. Tobianus.*

the satisfaction of seeing both *A. Tobianus* and *A. Lancea* taken indiscriminately. From the loose sand covered with water to about the depth of nine inches, the persons engaged in this occupation with great dexterity drew these fishes from their lurking-places, using for the purpose old reaping hooks. These are run through the sands with the right hand drawn towards the left, by which the fish is seized and transferred to a basket strapped round the waist and carried in front. It is in shape like the angler's, but much larger and open at the top. The *A. Tobianus* is said to be always scarce here compared with the *A. Lancea*, and is sometimes not to be found at all. An intelligent fisherman informed me that the greatest quantity he ever took of the former species during "one ebb" was twelve or thirteen quarts. It is by measure both kinds are estimated and sold, the *A. Lancea* producing from one to two pence the quart, and the "sneddens", being more highly prized on account of their superior size, one half more. On inquiring how the two species are distinguished when of equal size, one man stated by the difference of form, and chiefly in that of the head; and another said he knew them by colour alone. Although the difference was in each respect very apparent to myself, I put both parties to the test, and found that the one guided by form, and the other by colour, drew the *A. Tobianus* from his basket with equal dexterity, and without a moment's hesitation singled it out from hosts of the *A. Lancea*. This fishing is carried on here daily throughout the year except in winter, when being full of spawn the sand-eels are considered unfit to be eaten. At other times they are used by all classes of people. In the excellent hotel at Dundrum they were served up to us at dinner along with salmon, and were fried with crumbs of bread strewed over them—for breakfast they are similarly cooked. The poorer people dry them in the sun, and in bright days the tables and trays of the cottage are sure to be seen set out before the doors covered with sand-eels.

August 27.—At Newcastle, about three miles south of Dundrum, great quantities of sand-eels were taken at the morning-ebb of the spring-tide; by some individuals so many as forty quarts. In the evening I reckoned about eighty persons out fishing, and having two one-horse carts in readiness beside

them to carry away the produce; but the harvest that was then gathered fell short of requiring such extra aid*.

Having observed a number of pigs at Newcastle daily frequenting the sand at the extreme edge of the retiring waves, I ascertained, as had been anticipated, that they were in search of sand-eels. This however was not the chosen feeding-ground of these animals, as I subsequently saw them regularly driven out there to forage for themselves. The *A. Tobianus* though taken here is less frequent than at Dundrum.

When at Ballywalter, on the coast of Down, and northwards of the last-mentioned place, in May 1836, I found a few of *A. Tobianus* by examining the sand-eels which fishermen were using as bait, and in the month of March following, obtained a specimen along with two of the *A. Lancea* from the stomach of a sea trout (*S. Trutta*) taken at Donaghadee. On questioning some fishermen at Portaferry, situated just within the entrance to Strangford Lough, in the same county, respecting the two species of sand-eel, I learned that they had not been as such distinguished by them. It was however stated, that they occasionally obtained much larger individuals than ordinary, which from colour were named "green-backs," the common being called sand-eels: the former both from superior size and different colour must doubtless be the *A. Tobianus*.

Amongst a few fishes found dead on the beach at Cairnlough near Glenarm (county of Antrim) in June 1836, by Dr. J. L. Drummond, was a specimen of the *A. Tobianus*. In this as well as every other instance in which I have seen the last-named species, specimens of *A. Lancea* occurred at the same time.

In the 'Wild Sports of the West' there is a short but graphic account of sand-eel fishing by moonlight on the coast of Mayo; and at Strangford Lough and other places in the north of Ireland it is likewise a favourite pastime of the young in the moonlight nights of summer. It is said that from the silvery brilliance of the fish being more striking by night than

* "The coast [at Newcastle] affords plenty and variety of sea fish; and such quantities of sand-eels have sometimes been taken on it, particularly in the late season of scarcity, that the poor carried them away in sacksfull."—Harris's Down, (p. 81.) published in 1744.

day, it is at this time captured with greater facility; but is it not rather for the novelty of *dry-land* fishing, with the additional feature of being achieved by moonlight, that the sport is at this time practised*? Although the sand-eel is noticed in several of the Statistical Surveys of the Irish counties, there is not that I recollect any remark which would lead us to suppose that more than one kind has been observed; but there can be little doubt that both species are found elsewhere than on the coasts of Down and Antrim.

The largest specimen of *A. Tobianus* obtained at Dundrum was 13 inches long. D. 56 (first very short), P. 13, A. 29, C. 15. In all the characters of *form* and relative proportion of parts it agrees with the descriptions of Yarrell and Jenyns. In *colour* this species is of a dark bluish green, while the *A. Lancea* is of a sandy hue like the Atherine (*A. Presbyter*), but tinged partially on the back and sides with bluish green. From the mouth of the specimen described I took a small individual of of its own species†: Bloch and Couch mention similar instances.

The largest *A. Lancea* procured at Dundrum was 8 inches long. D. 54, P. 11, A. 27, C. 14.

Dorsal fin commencing "in a line with the last quarter," and not above "the middle" of the pectoral fins.

Syngnathus Typhle, Linn. Deep-nosed Pipe-fish.—An individual of this species, above 8 inches in length, and obtained in 1835 at Glendore, county of Cork, by Mr. Allman, has been forwarded for my inspection by Mr. R. Ball. Among some small fishes taken along with crustacea, &c. in Larne Lough (county of Antrim) during the summer of 1836, by Mrs. Patterson of Belfast, and very kindly sent to me, was a specimen of *S. Typhle*. Though only 1 inch 2 lines in length, every character in proportion to its size was as strongly marked as in the adult fish.

Syngnathus æquoreus, Linn. Æquoreal Pipe-fish.—A specimen of this fish taken at Youghal (county Cork) has

* Mr. Lukis states that in Guernsey they are sought for by moonlight.—Yarr. Brit. Fish. vol. ii. p. 324.

† An observant friend once saw a sand-eel about four inches in length, taken with bait, which was either a piece of herring or a composition of feathers—the latter a common bait for the coal-fish (*Merlangus Carbonarius*) in the north of Ireland.

been submitted to my examination by Mr. R. Ball. Its length is 19 inches, rays of dorsal fin 40. It corresponds in all respects with this species as admirably characterized by Mr. Jenyns (p. 486); as also does another individual obtained in the autumn of 1836 on the beach near Larne (county Antrim), by Mr. James Marks of that town, who presented it to the Belfast Museum. This specimen is 21½ inches long, but being imperfect at the caudal extremity, must when entire have been at least one inch more. Its D. rays 41. March 15, 1838. I received from George Matthews, Esq. of Spring-vale (county Down), a perfect and beautiful specimen of this fish which was found on the beach there after a high tide during the boisterous weather about the beginning of this month. Its length is 22¼ inches. D. rays 46. Caudal fin apparent to the naked eye; its rays distinguished by a lens, 8 in number. This *Syngnathus* was in the present instance preserved and forwarded to me on account of the fishermen being unacquainted with it.

Syngnathus Ophidion, Bloch. Snake Pipe-fish.—From Mr. R. Ball I have received two specimens of *S. Ophidion*, which were procured in 1835 at Glendore (by Mr. Allman) and Youghal. The larger one is upwards of a foot in length, and with the unimportant difference of *its* having 41 rays on the dorsal fin, both individuals agree in every character with the descriptions of this species by Jenyns and Yarrell, which are much more minute than Bloch's account of it. Mr. Ball has subsequently informed me of his having received a third specimen, about 14 inches in length, from Youghal, where it was captured in July 1836. Soon after this time I received a *S. Ophidion* from the coast of the county of Antrim.

Hippocampus brevirostris, Cuv.? Sea-horse.—Vide Zool. Proc., 1837, p. 58, for the first specimen recorded as Irish. In addition to the individual there mentioned, a *Hippocampus* was taken alive in Belfast Bay in July 1837, by my relative Richard Langtry, Esq., and though ordered to be preserved for me, was unfortunately lost. In consequence of this, its species, as in the former instance, cannot be given with certainty*.

* I am credibly informed that a *Hippocampus* was found dead on the beach near Youghal, on the southern coast, a few years ago.

Petromyzon Planeri, Cuv. Fringed-lipped Lamprey.—I am indebted to Mr. R. Ball for two specimens of this fish, which were obtained in the vicinity of Naas, county of Kildare. They are 4½ and 5 inches in length respectively; the smaller one only has the "anal sheath," which is two lines long. (See fig. in Yarr. B. F. vol. ii. p. 457.) The dentition in these specimens is similar to that shown in Mr. Yarrell's figure of *P. fluviatilis*, and consequently in this character they do not accord with his figure of the mouth of *P. Planeri*; in this same wood-cut however, the chief peculiarity of the species—the fringed lip—is well represented. The dentition or "armature of the mouth" of *P. fluviatilis* and *P. Planeri* is similar, as remarked by Mr. Jenyns*.

April 2, 1838. From the Rev. Charles Mayne, Vicar General of Cashel—to whose kindness I have in several instances been indebted for specimens of fishes, &c., from the river Shannon—I to-day received a lamprey, 4¾ inches in length, recently taken in the vicinity of Killaloe, and which proved to be the *P. Planeri*.

Addendum to vol. i. p. 356.

Gobius gracilis. Dublin, June 1838.—In the collection of my friend Robert Ball, Esq. of this city, there are two specimens of *Gobius gracilis* about 3 inches in length, from Youghal. On closely comparing them with individuals of *Gobius minutus* of equal size, the differences in so far as they are above mentioned are very obvious; but further, as in those before examined, I cannot perceive any constant characters.

III.—*Botanical Notes of a Tour in Ireland, with Notices of some new British Plants.* By J. Ball, Esq., of Christ College, Cambridge.

The attention of British naturalists having been recently directed towards the wide field for investigation which Ireland presents to them, it may perhaps not be inappropriate to offer some additional information for the botanical tourist, gathered

* Dublin, June 1838.—Specimens of this Lamprey have lately been received by R. Ball, Esq. from Inch river, about ten miles north-west of Youghal.